

have more rain in late summer than in early summer.² Wilmington has about four inches more rain in August–September, than in April–June.

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Talinum rugospermum

JOHN M. HOLZINGER

This plant was first described in the Asa Gray Bulletin of December 1899. An error in the description and in the drawings makes it desirable to describe it again and include the corrections.

Although in reach of the type station all these years, I had not had an opportunity of visiting it till July of the present year. It was collected on the sand dunes of Trempealeau Bay, Wis. on the farm of Richard Gillis. The recent collection showed this species to be perennial,—the first description gave it as annual. This error was due to the fact that the description was made from seedlings raised in my garden, which bloomed the first year.

Further, the printer made the seeds of the two species look alike, though the description stated the facts correctly: the seed of the Wisconsin species is rugose, that of *Talinum teretifolium* is smooth and shiny.

Two points were not adequately emphasized: the Wisconsin plant grows in sandy soil, and has no corm; the eastern plant grows on rock, and generally has a corm. Otherwise the two plants look very much alike.

Following is a corrected and more complete description of *Talinum rugospermum*.

Stem cylindrical, fleshy, perennial, one or more inches long, forming short branches on the older plants; leaves crowded near the top of the stem or branchlets, 1 to 2 inches long, terete, fleshy; inflorescence on a peduncle, 4 to 6 inches long, slender, cymose, the bracts small, about 1/12 inch long, narrowly triangular, prolonged below the point of attachment into a semicircular lobe; sepals 2, early deciduous; flowers when open $\frac{1}{2}$ inch in diameter, light pink, petals ovate, opening but once,

² See Science II. 48:208–211. Aug. 30, 1918. For a map showing the line of equilibrium between early and late summer rain, and the approximate proportion of evergreens in the forests of the United States, see Engineering & Mining Journal, 112:693. Oct. 29, 1921. Also Literary Digest a few weeks later.

between 3:30 and 4 P.M. and closing at 6 P.M., shrivelling as they close; stamens 12-25, their filaments deeper pink than the petals, anthers bright yellow, short; style cleft $\frac{1}{3}$ of its length; the 3 valves of the capsule falling on ripening, scattering the rugose seeds. (The seed was not correctly figured in the Asa Gray Bulletin, Dec. 1899, p. 116: the seeds of *T. rugospermum* should have rugose lines, that of *T. teretifolium* should be smooth.)

It is in prime condition the last week in July.

To distinguish the two species the following comparison is given:

T. teretifolium has long anthers, short style lobes, black, shining seeds, flowers open once, from noon till 3 P.M.

T. rugospermum has short anthers, long style lobes, gray minutely rugose seeds, flowers open once, from 3:30 till 6 P.M. The two plants look much alike. The former occurs more to the East, the latter, further West.

WINONA, MINN.

✓ *Solidago petiolata* Miller and some other golden-rods

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In his various works and different editions Philip Miller (1691-1771) had a very considerable number of golden-rods. For a long time he did not adopt the Linnaean binomial system, but in the concluding years of his life he issued two works, the eighth edition of his *Gardeners Dictionary* published in 1768, and the sixth edition of his *Abridgement of the Gardeners Dictionary* published in 1771, in which he published a number of binomial names for American species of *Solidago*. His descriptions are usually good. In fact compared with those in Aiton *Hortus Kewensis* they are wonderfully good. However, it is evident that he did not know the species, and was much perplexed by them. He himself wrote "It is very difficult to settle the specifick differences of those now growing in the English gardens, for of late years there has been a great number of these and also of *Asters* raised from seeds, which have been sent from North America, from whence most of the sorts here mentioned originally came. But as the seeds have been gathered by persons little acquainted with the science of botany, so they